

CLAIMS

1. A stud spacer for extending between two studs comprising:
 - a. a main member adapted to extend between the two studs;
 - b. the main member including first and second end portions;
 - c. a projection extending from each end portion; and
 - d. wherein the projections of the main member interlock with similar projections of other main members.
2. The stud spacer of claim 1 wherein each projection includes a locking surface, an opening, a deflector disposed adjacent the opening, and a stop.
3. The stud spacer of claim 2 wherein when two projections are interlocked, the locking surface of one projection engages the stop of the other projection.
4. The stud spacer of claim 1 wherein each projection is elongated and when connected to a similar projection at least partially overlies or underlies the similar projection.
5. The stud spacer of claim 5 wherein each of the two projections includes a deflectable terminal end and an opening.
6. The stud spacer of claim 1 wherein each projection includes a terminal end portion, a locking tab disposed on the terminal end portion, a deflector disposed inwardly of the locking tab; an opening formed in the projection adjacent the deflector; and a stop disposed inwardly of the opening.
7. A stud spacer assembly for extending between a series of studs, comprising:
 - a. at least first and second stud spacers;
 - b. said first stud spacer including a first projection and said second stud spacer including a second projection;

- c. said first and second projections adapted to interlock so as to connect the first and second stud spacers together; and
- d. wherein each projection includes a locking surface and a stop and wherein when interlocked, the locking surface of the first projection is engaged with the stop of the second projection and the locking surface of the second projection is engaged with the stop of the first projection.

8. The stud spacer assembly of claim 7 wherein when connected the first and second projections overlie each other.

9. The stud spacer assembly of claim 8 wherein each projection includes an opening and wherein when connected the first projection extends through the opening of the second projection and the second projection extends through the opening of the first projection.

10. The stud spacer assembly of claim 9 wherein at least a portion of each projection is at least slightly yieldable such that a portion of each projection can slightly flex during the course of interconnecting the projections.

11. The stud spacer assembly of claim 7 wherein each projection includes an opening and a deflector and wherein the locking surface of each projection is formed on a terminal end portion of the projection and wherein when connected the terminal end portion of the first projection projects through the opening in the second projection and the terminal end portion of the second projection projects through the opening in the first projection.

12. The stud spacer assembly of claim 11 wherein the deflector of the first projection deflects the terminal end of the second projection through the opening of the first projection and wherein the deflector of the second projection deflects the terminal end of the first projection through the opening in the second projection.

13. The stud spacer assembly of claim 7 wherein the locking surface includes a tab and the stop includes a tab receiving opening and wherein when the first and second projections are interconnected the first projection is extended over a portion of the second projection and a portion of the first projection is inserted through the opening in the second projection such that the locking tab of the first projection seats within the tab receiving opening formed in the second projection and wherein the second projection is extended underneath a portion of the first projection and a portion of the second projection is inserted through the opening in the first projection wherein the locking tab of the second projection seats within the tab receiving opening of the first projection.

14. The stud spacer of assembly of claim 13 wherein each projection includes a deflector disposed adjacent the tab receiving opening and wherein the deflector on the first projection deflects a portion of the second projection upwardly through the opening in the first projection, and wherein the deflector in the second projection deflects a portion of the first projection downwardly through the opening in the second projection.

15. The stud spacer assembly of claim 7 wherein the locking surface of each projection includes a tab and wherein the stop of each projection includes a tab receiving opening and when the projections are connected the respective tabs are seated within the tab receiving openings.

16. A wall structure, comprising:
- a. a series of spaced apart studs with each stud having an opening formed therein;
 - b. a series of stud spacers extending between respective studs;
 - c. each stud spacer including first and second projections that extend from opposite ends of the stud spacer;

- d. said first and second projections of each stud spacer adapted to connect to first and second projections of other stud spacers so as to interconnect the stud spacers of the wall structure; and
- e. each projections including a locking surface and a locking stop and wherein when interconnected the locking surface of the first projection is engaged with the locking stop of the second projection and the locking surface of the second projection is engaged with the locking stop of the first projection.

17. The wall structure of claim 16 wherein when connected the respective projections at least partially overlie one another.

18. The wall structure of claim 17 wherein the first projection includes a terminal end portion and an opening and the second projection includes a terminal end and an opening and wherein the terminal end portions of the respective projections are projected through the openings within the projections when the projections are interconnected.

19. A method of interconnecting a first stud spacer with a second stud spacer extending between studs in a wall structure wherein the first stud spacer includes a first projection and the second stud spacer includes a second projection, comprising the steps of:

- a. projecting the first projection through an opening in the second projection and engaging a locking surface associated with the first projection with a stop associated with the second projection; and
- b. projecting the second projection through an opening in the first projection and engaging a locking surface associated with the second projection with a stop associated with the first projection.

20. The method of claim 19 including engaging the first projection with a deflector associated with the second projection and deflecting the first projection through the opening in the second projection, and engaging the second projection with a deflector associated with the first projection and deflecting the second projection through the opening in the first projection.

21. The method of claim 20 including at least slightly bending a portion of each projection as the two projections are interconnected.

22. The method of claim 21 wherein the projections are at least slightly flexed in response to engaging the respective deflectors carried by the projections.

23. The method of claim 19 wherein the locking surfaces comprise locking tabs and wherein the stops comprises locking seats and wherein when the projections are interconnected the locking tabs of the respective projections are seated within the locking seats of the projections.

24. The method of claim 19 including contacting a terminal end of the first projection with a deflector disposed on the second projection and deflecting the terminal end of the first projection downwardly through the opening in the second projection; and contacting a terminal end portion of the second projection with a deflector on the first projection and deflecting the terminal end of the second projection upwardly through the opening in the first projection.

25. The method of claim 24 wherein the locking tabs carried by the first and second projections snap into the tab receiving openings once the terminal ends of the respective projections have been inserted through the openings in the respective projections.